



Brian Murphy, CPC
Director, ACDIS, HCPro, Inc.

Like the related nonspecific terminology of chronic renal insufficiency (ICD-9-CM code 585.9) and urosepsis (599.0), physicians often default to the nonspecific term of altered mental status (AMS) (780.97) when describing psychiatric aspects of medical illness. Unfortunately, AMS is a generic symptom, which, if characterized with more specific terminology such as delirium, dementia, psychosis, stupor, or coma, can add relative weight in the various DRG methodologies.

Likewise, physicians sometimes do not characterize or document the underlying causes of AMS, which can include the various encephalopathies, neurodegenerative or psychiatric disorders, and ischemic or structural brain diseases, says **James S. Kennedy, MD, CCS**, director at FTI Healthcare in Brentwood, TN. "In essence, altered mental status is to neurology what noncardiac chest pain is to cardiology—a lower-weighted diagnosis whose severity improves with definition and documentation of the chronicity and nature of the symptom and the underlying cause."

Physician documentation of the various encephalopathies is particularly problematic. In a recent poll conducted on the ACDIS Web site, 54% of 124 reporting ACDIS members said physicians did not document encephalopathy in the chart when it was clinically present or only documented it after receiving a query (see Figure 1 below).

One reason for this problem is that the term "encephalopathy" is not overtly defined in much of the mainstream medical literature—including

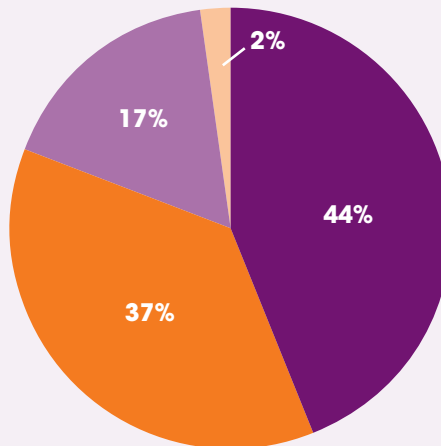
FEATURES

- Encephalopathy defined 2
- Educate your physicians on encephalopathy 3
- Develop a verbal physician query policy for AMS 4
- Develop a compliant written query for encephalopathy 5
- Sample query form for altered mental status 5

Figure 1: How well do your physicians document encephalopathy?

- 44% Very well/requires few queries
- 37% They will, but only upon query or request for clarification
- 17% They typically do not use this term/ we rarely report this diagnosis
- 2% Not sure

Source: www.cdiasassociation.com.



gold-standard textbooks *Harrison's Principles of Internal Medicine* and *Adams and Victor's Principles of Neurology*. Consequently, physicians often overlook or are uncomfortable using the term, opting for AMS or a variation thereof. AMS is also used throughout many popular medical journals, including *The New England Journal of Medicine*, which exacerbates the problem, Kennedy says.

But because 780.97 is an ICD-9-CM Chapter 16 symptom code and the *ICD-9-CM Official Coding Guidelines* state that coders should not report these symptom codes if a physician establishes a related definitive diagnosis, a hospital's query policy should stipulate that a CDI or coding specialist should query for the underlying cause of AMS in appropriate circumstances.

Encephalopathy defined

Encephalopathy has many definitions throughout medical literature. *Dorland's Medical Dictionary*, a reference provided by 3M™'s coding software, defines encephalopathy as any degenerative disorder of the brain. The American Hospital Association's *Coding Clinic for ICD-9-CM*, 4th Quarter 1993, states that toxic or metabolic encephalopathy denotes delirium, which, according to *Coding Clinic for ICD-9-CM*, 4th Quarter 2003, always has an underlying cause, such as brain tumors, brain metastasis, cerebral infarction or hemorrhage, cerebral ischemia, uremia, poisoning, systemic infection, or other illnesses.

These definitions may be too broad, given that any degenerative brain disease (e.g., Alzheimer's disease or Lewy body dementia) or well-defined focal structural brain diseases (e.g., strokes or brain tumors) could be interpreted as an encephalopathy, says Kennedy. *Coding Clinic* likewise states that any clinical definition that it provides is educational and should not be construed as official advice for coding purposes.

The best and most defensible definition of encephalopathy is published by the National Institutes of Health's National Institute of Neurological Disorders and Strokes, says James S. Kennedy, MD, CCS.

● The best and most defensible definition of encephalopathy is published by the National Institutes of Health's (NIH) *National Institute of Neurological Disorders and Strokes*, says Kennedy. You can find this definition at www.ninds.nih.gov/disorders/encephalopathy/encephalopathy.htm. This publication defines encephalopathy as follows:

Encephalopathy is a term for any diffuse disease of the brain that alters brain function or structure. Encephalopathy may be caused by infectious agent (bacteria, virus, or prion), metabolic or mitochondrial dysfunction, brain tumor or increased pressure in the skull, prolonged exposure to toxic elements (including solvents, drugs, radiation, paints, industrial chemicals, and certain metals), chronic progressive trauma, poor nutrition, or lack of oxygen or blood flow to the brain. The hallmark of encephalopathy is an altered mental state. Depending on the type and severity of encephalopathy, common neurological symptoms are progressive loss of memory and cognitive ability, subtle personality changes, inability to concentrate, lethargy, and progressive loss of consciousness. Other neurological symptoms may include myoclonus (involuntary twitching of a muscle or group of muscles), nystagmus (rapid, involuntary eye movement), tremor, muscle atrophy and weakness, dementia, seizures, and loss of ability

to swallow or speak. Blood tests, spinal fluid examination, imaging studies, electroencephalograms, and similar diagnostic studies may be used to differentiate the various causes of encephalopathy.

Kennedy says the following sources support this definition:

- *Neurology Board Review* articles written by physicians at Massachusetts General Hospital in Boston and the University of California at San Francisco. These articles characterize encephalopathy as a generalized cortical dysfunction characterized by an acute-to-subacute course (hours to days), prominent fluctuations in the level of consciousness, poor attention, frequent hallucinations and delusions, and changes in the level of psychomotor activity (generally increased, but at times decreased). You can find these articles at www.turner-white.com/pdf/brm_Neur_pre12_1.pdf.
- *The Diagnosis of Stupor and Coma* by Plum and Posner, available at <http://content.nejm.org/cgi/content/short/357/7/727>. "This [book] provides the best clinical descriptions of the various encephalopathies and is available in many medical libraries," Kennedy says.

Examples of encephalopathy in ICD-9-CM include metabolic, septic, toxic, hypertensive, and hepatic, Kennedy says.

"It's those nonstructural, nondegenerative illnesses like drug overdoses or hypertension or metabolic issues like hyponatremia or liver failure that result in encephalopathies."

—James S. Kennedy,
MD, CCS

● A good rule of thumb to remember is that most encephalopathies are caused by other diseases or entities from outside the brain. "It's those non-structural, nondegenerative illnesses like drug overdoses or hypertension or metabolic issues like hyponatremia or liver failure that result in encephalopathies," Kennedy says.

Because encephalopathy is an MCC under MS-DRGs and highly weighted when calculating severity in the APR-DRG system, it will be a target of recovery audit contractors and other outside auditors.

Educate your physicians on encephalopathy

If physicians in your hospital document AMS and rarely or never describe its underlying cause, you must provide education. Teach physicians that AMS is a nonspecific symptom, "similar to what happens when you're watching the Super Bowl and drinking beer," Kennedy says. "It's not wrong to say to the physician, 'That's only a symptom code.'"

Provide the following references to physicians in educational sessions or in the physician newsletter:

- www.ninds.nih.gov/disorders/encephalopathy/encephalopathy.htm
- <http://en.wikipedia.org/wiki/encephalopathy>

Kennedy also recommends *The Diagnosis of Stupor and Coma*, as noted above. "It remains one of the best detailed observational references to the condition and is recognized by almost every physician as an authoritative text," he says.

Develop a verbal physician query policy for AMS

When a concurrent CDI specialist sees AMS documentation, he or she should first seek to clarify the nature of the AMS through an appropriate verbal query (e.g., is the patient delirious, demented, psychotic, confused, stuporous, comatose, or another term that the CDI specialist is comfortable with?). An appropriate question to ask is, "Can you be more specific about the nature of the altered mental status?"

"Don't go straight to encephalopathy, as that's putting the cart before the horse. We've got to first get the physicians to be specific of the nature of the AMS."

—James S. Kennedy,
MD, CCS

● "Don't go straight to encephalopathy, as that's putting the cart before the horse," Kennedy says. "We've got to first get the physicians to be specific of the nature of the AMS."

Once the physician documents the nature of the AMS and whether it is chronic or acute, ask him or her to document its likely underlying cause. The causes of AMS fall into the following four broad categories:

- **Neurodegenerative disease.** Types include:
 - Alzheimer's disease (in which case the physician must specify whether the patient is delusional, depressed, or psychotic)
 - Lewy body dementia (associated with Parkinson's disease)
- **Psychiatric illnesses.** For example:
 - Mood disorders (specified as to the type, such as unipolar depression or bipolar disorder, types 1 and 2)
 - Schizophrenia (specified as to the type)
 - Chemical dependencies, including drug withdrawal syndrome
- **AMS caused by a focal structural problem with the brain.** For example, AMS due to a seizure, concussion, stroke, transient ischemic attack, or tumor.
- **AMS caused by global dysfunction of the brain (i.e., encephalopathy).** This is specified by the type (e.g., toxic, septic, metabolic, hypertensive, or hepatic).

Of the four causes of AMS, physicians typically document encephalopathy least frequently. If a physician does indicate encephalopathy following a query, use it as a teaching moment: Ask him or her to define it. "This will make him think that he doesn't know [a definition]. Provide references from Plum and Posner or the NIH, which are the best references there are," Kennedy says.

Kennedy also recommends that CDI specialists incorporate the acronym MUSIC into their query thought processes. MUSIC stands for:

- **Manifestation:** The nature of the altered mental status
- **Underlying condition:** As described above
- **Severity** (acute or chronic)
- **Instigating cause** (e.g., if the encephalopathy is due to a toxic substance, was the drug taken as prescribed or was it an accidental overdose?)
- **Consequences** (e.g., did the patient fall and break a bone? Was it a pathological fracture?)

In short, Kennedy recommends querying the physician for encephalopathy if the patient has AMS and no underlying structural problem with his or her brain.

- In short, Kennedy recommends querying the physician for encephalopathy if the patient has AMS and no underlying structural problem with his or her brain. Do not consider encephalopathy as a possible diagnosis if the patient's AMS is caused by a predefined structural problem or a neurodegenerative disease.

Develop a compliant written query for encephalopathy

When developing a written query for encephalopathy, Kennedy recommends that CDI specialists develop and follow a query policy modeled after the October 2008 AHIMA physician query practice brief, available on the AHIMA Web site (http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_040394.hcsp?dDocName=bok1_040394).

Develop a multiple-choice checklist with clinically credible options, as well as the options of "other" and "unable to determine" (see the sample query form below). Place the diagnoses in alphabetic order so as not to influence the physician.

Sample query form for altered mental status

Dr. Jones, altered mental status is documented in the record. Please indicate the nature and chronicity of the patient's alteration of mental status:

Nature

- ☐ Dementia
- ☐ Delirium
- ☐ Psychosis
- ☐ Obtundation
- ☐ Stupor
- ☐ Coma
- ☐ Vegetative state
- ☐ Other: _____
- ☐ Unable to determine

Chronicity

- ☐ Acute
- ☐ Chronic
- ☐ Acute on chronic
- ☐ Other: _____
- ☐ Unable to determine

Please indicate the underlying cause of the altered mental status present on this admission (check all that apply):

- ☐ Alzheimer's disease
- ☐ Encephalopathy (indicate type and underlying medical illness)
- ☐ Lewy body dementia
- ☐ Acute stroke
- ☐ Late effect of stroke
- ☐ Transient ischemic attack
- ☐ Generalized cerebral ischemia
- ☐ Seizure disorder (state its nature and whether status epilepticus is present or symptoms are intractable)
- ☐ Normal pressure hydrocephalus
- ☐ Psychiatric illness (indicate type)
- ☐ Other: _____
- ☐ Unable to determine

CDI specialists and HIM/coding staff members should develop and follow a facility-specific policy for all clinical queries and apply it to all patients regardless of whether it affects reimbursement or quality scores, says James S. Kennedy, MD, CCS.

- CDI specialists and HIM/coding staff members should develop and follow a facility-specific policy for all clinical queries and apply it to all patients regardless of whether it affects reimbursement or quality scores, Kennedy says. “Developing and applying a policy that encourages physicians to specify the nature, chronicity, and underlying cause of AMS goes a long way in ensuring that ICD-9-CM coding accurately represents our patient’s severity of illness essential to sound fiscal policies,” he says. ■